

below for the Examiner's convenience. A marked-up copy, showing the changes made to the claims, is attached.

1. (Amended) A negative pressure producing fiber body for use in a container for containing a liquid, which is to be supplied to a liquid ejecting head for ejecting the liquid for recording, in a manner that allows the liquid to be supplied, comprising;

a first portion having an olefin resin at least on a fiber surface thereof, said olefin resin having a hydrophilic group; and

a second portion having a group of which interfacial energy is lower than that of said hydrophilic group and almost the same as the surface energy of said fiber surface;

wherein said second portion is oriented toward said fiber surface and said first portion is oriented in a direction different from said fiber surface.

2. (Unamended From Previous Version) A fiber body for use in a container for containing a water-based liquid, which is to be supplied to a liquid ejecting head for ejecting the water-based liquid for recording, in a manner that allows the water-based liquid to be supplied, consisting of a fiber provided with a polymer at least part of its surface,

said polymer including a first portion having a hydrophilic group and a second portion having a group of which interfacial energy is lower than that of said hydrophilic group and almost the same as the surface energy of said part of the surface,

said second portion being oriented toward said part of the surface, said first portion being oriented in the direction different from said part of the surface.

3. (Unamended From Previous Version) The fiber body according to claim 2, wherein the surface of said fiber consists of an olefin resin and said polymer is polyalkylsiloxane including a hydrophilic group.

4. (Unamended From Previous Version) The fiber body according to claim 3, wherein said hydrophilic group has a polyalkylene oxide chain.

5. (Unamended From Previous Version) The fiber body according to claim 3, wherein said olefin resin is polypropylene or polyethylene and said polyalkylsiloxane is polyoxyalkylene-dimethylpolysiloxane.

6. (Unamended From Previous Version) A liquid container containing the fiber body according to any one of claims 2 to 5 as a negative pressure generating member.

7. (Unamended From Previous Version) A liquid container comprising a negative pressure generating member containing portion for containing the fiber body according to any one of claims 2 to 5 as a negative pressure generating member and a liquid containing portion for supplying liquid to said negative pressure generating member containing portion, said liquid containing portion and said negative pressure generating member containing portion constituting an integrally or removably formed unit.

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8. (Unamended From Previous Version) The liquid container according to claim 7, comprising an inner bag for containing liquid, which becomes deformed as the liquid contained therein becomes led out and thereby can produce a negative pressure, a casing for covering said inner bag, and an atmosphere communication port which can introduce atmosphere between said casing and said inner bag.

9. (Unamended From Previous Version) A liquid container comprising a supply opening for supplying liquid to a liquid ejecting head and an atmosphere communication port for allowing the interior thereof to communicate with the atmosphere and containing a negative pressure generating member, wherein the fiber body according to claim 2 is arranged in the interior portion of said supply opening.

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25. (Unamended From Previous Version) A fiber body having an olefin resin at least on its surface, said surface having a reformed portion having been subjected to surface treatment of giving hydrophilic nature thereto, and-applied to a negative pressure producing portion for use in an ink jet apparatus, comprising a wettable surface structure obtained in the following steps of: attaching on the surface of said fiber a treatment agent containing a polymer, which has a hydrophilic group and a group having an interfacial energy almost the same as the surface energy of said olefin-based fiber surface thereon, a dilute acid as a catalyst for said polymer cleavage and alcohol; subjecting said polymer to cleavage by evaporating the treatment agent attached on the surface of said fiber and allowing said dilute acid to be a concentrated acid; and condensing the product of the polymer cleavage.

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31. (Cancelled)

32. (Amended) A fiber, which constitutes an ink absorber applied to a negative pressure producing portion for use in an ink jet apparatus, having a reformed surface with a functional group introduced thereon, wherein the surface of said fiber has a condensate of a polymer fragmented product attached thereon, said condensate being obtained by condensing the polymer fragmented product comprising a second portion having a group of which interfacial energy is almost the same as the surface energy of said fiber surface and a first portion having said functional group in a state where said polymer fragmented product is oriented based on the affinity to said fiber surface of the group of which interfacial energy is almost the same as the surface energy of said surface, said polymer fragmented product being obtained by subjecting a polymer compound comprising said first portion and said second portion to cleavage.

33. (Unamended From Previous Version) A fiber, which constitutes an ink absorber applied to a negative pressure producing portion for use in an ink jet apparatus, having a periphery portion consisting of a curved surface of which cross section has a periphery in the form of a closed ring, having on said periphery portion at least a portion coated with a film which contains a polymer and surrounds the periphery of said periphery portion in the form of a closed ring, and having been subjected to surface reforming on the surface portion coated with the film containing said polymer, wherein said polymer is a material which is soluble in a solvent or of which main skeleton is different from said fiber surface and comprises a first portion having a functional group used for reforming said surface and a second portion having a group of which

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interfacial energy is different from that of said functional group but almost the same as the surface energy of said surface, said second portion being oriented toward said surface, said first portion being oriented in the direction different from said surface.

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45. (Amended) A fiber having a hydrophobic surface part of which has been subjected to surface reforming into a hydrophilic surface and constituting an ink absorber which is applied to a negative pressure producing portion for use in an ink jet method, wherein a polymer fragmented product having a hydrophilic group and a hydrophobic group is attached on said hydrophobic surface in such a manner as that said hydrophobic group is oriented toward the surface of said hydrophobic group and said hydrophilic group is oriented in the direction different from said hydrophobic group, said polymer fragmented product being obtained by

subjecting a polymer compound comprising said hydrophilic group and said hydrophobic group to cleavage.

46. (Unamended From Previous Version) The fiber according to claim 45, comprising a core portion and a surface layer covering said core portion, each of said core portion and said surface layer consisting of an olefin resin, the melting point of the resin constituting said core portion being higher than that of the resin constituting said surface layer.

47. (Unamended From Previous Version) The fiber according to claim 46, wherein the resin constituting said core portion is polypropylene and the resin constituting said surface layer is polyethylene.

48. (Unamended From Previous Version) The fiber according to claim 47, wherein said core portion is partially exposed to the outer wall surface and said polymer fragmented products are attached both on the surface of the exposed portion of said core portion and on the surface of said surface layer.

49. (Unamended From Previous Version) The fiber according to any one of claims 45 to 48, wherein said polymer compound is polyalkylsiloxane having a hydrophilic group.

50. (Unamended From Previous Version) The fiber according to claim 49, wherein said polymer compound has a polyalkylene oxide group as said hydrophilic group.

51. (Unamended From Previous Version) The fiber according to any one of claims 45 to 48, wherein polyalkylsiloxane having said hydrophilic group is (polyoxyalkylene)-poly(dimethylsiloxane).

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52. (Unamended From Previous Version) A wettable surface structure constituting an ink absorber which is applied to a negative pressure producing portion for use in an ink jet apparatus and holding a liquid supplied thereto, comprising a polymer having relatively long chain lyophilic groups and relatively short chain lyophobic groups alternately.

53. (Unamended From Previous Version) A fiber body which has an olefin resin at least on its surface, has part of its surface reformed to be hydrophilic, and is applied to a negative pressure producing portion for use in an ink jet apparatus, comprising a wettable surface structure having relatively long chain hydrophilic groups and relatively short chain hydrophobic groups alternately on said fiber surface, the wettable surface structure being obtained by the following steps of: forming a fiber surface having a treatment liquid attached thereon, the treatment liquid comprising a polymer having a hydrophilic group and a group of which interfacial energy is almost the same as the surface energy of the fiber surface comprising said olefin resin as a constituent, a dilute acid as a catalyst for said polymer cleavage and alcohol; subjecting said polymer to cleavage by evaporating the treatment liquid attached on said fiber

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surface and allowing said dilute acid to be changed to a concentrated acid; and condensing the polymer cleavage products.

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62. (Unamended From Previous Version) A fiber absorber, as an assembly of numbers of fibers, for use in liquid ejection which has a olefin resin at least on its surface and a reformed surface obtained by subjecting at least part of said surface to surface reforming of giving lyophilic nature thereto and is used for holding a liquid supplied to a liquid ejecting head under a negative pressure, comprising a wettable surface structure having relatively long chain hydrophilic groups and relatively short chain hydrophobic groups alternately on said fiber surface, the wettable surface structure being obtained by the following steps of:

forming a fiber surface having a treatment liquid attached thereon, the treatment liquid comprising a polymer having a hydrophilic group and a group of which

interfacial energy is almost the same as the surface energy of the fiber surface comprising said olefin resin as a constituent, a dilute acid as a catalyst for said polymer cleavage and alcohol; subjecting said polymer to cleavage by evaporating the treatment liquid attached on said fiber surface and allowing said dilute acid to be changed to a concentrated acid; and condensing the polymer cleavage products, said wettable surface structure having a first lyophilic area relatively superior in lyophilic nature and a second lyophilic area relatively inferior to the above first lyophilic area in lyophilic nature.

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REMARKS

This application has been carefully reviewed in light of the Office Action dated August 6, 2002 (Paper No. 9). Claims 1 to 9, 25, 32, 33, 45 to 53 and 62 are in the application, of which Claims 1, 2, 25, 32, 33, 45, 52, 53 and 62 are independent. Reconsideration and further examination are respectfully requested.